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REPORT OF THE INTERNATIONAL WORKING GROUP ON EDUCATIONAL TELEVISION (LONDON, NOVEMBER 22-27, 1964).

BY- FARRER-BROWN, LESLIE

CENTRE FOR EDUCATIONAL TELEVISION OVERSEAS

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THE WORKING GROUP DISCUSSED MATTERS RELATED TO EDUCATIONAL TELEVISION UNDER THE FOLLOWING HEADINGS--(1) ADVICE AND ASSISTANCE ON THE ESTABLISHMENT AND ORGANIZATION OF AN EDUCATIONAL TELEVISION SERVICE, (2) TRAINING OF PERSONNEL IN THE PRODUCTION AND PRESENTATION OF EDUCATIONAL TELEVISION PROGRAMS, (3) SUPPLY OF PROGRAM MATERIAL TO NEWLY DEVELOPED EDUCATIONAL TELEVISION SERVICES, AND (4) COORDINATION OF INFORMATION ON THE CAPACITY OF PRODUCING COUNTRIES TO ASSIST DEVELOPING COUNTRIES IN THE ABOVE FIELDS. (MS)

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Centre for Educational Television Overseas

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22nd—27th NOVEMBER, 1964

The Studio, Nuffield Lodge, Regent's Park,
London N.W.1. England

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FOREWORD

It was hoped that the discussions of the International Working Group recorded in this report would lead to beneficial action directed in the first place to a better understanding of what the developing countries need for the effective use of television in their educational advances, and in the second to more co-operative action by broadcasting organisations and others in helping to meet these needs.

The spirit displayed by the Working Group in examining these questions augured well for the realisation of this hope and the Group's views and recommendations are put forward in the belief that they can produce the required developments.

LESLIE FARRER-BROWN

INTRODUCTION

In 1963 the Ford Foundation made a grant of $400,000 to the Centre for Educational Television Overseas to develop its work in the international field, and particularly to further international co-operation in the establishment of educational television in developing countries. At that time the rapidly growing interest by emergent countries in the use of educational television had begun, and a number of countries with experience in this field had been giving individual aid when they were asked for it. It was becoming generally apparent that it would be desirable to explore the forms of aid which could be offered and to discover whether some degree of co-ordination would be practicable and would result in greater effectiveness. Equally, those concerned realised that there was considerable research to be done into the precise needs of developing countries as regards organisation, programming and the training of personnel.

As a result, the Centre decided that some of the generous grant given by the Ford Foundation should be used to bring together experts representing the major broadcasting organisations that had interested themselves in educational television and some prominent educationalists from the developing countries so that they could exchange ideas and try to draw up a pattern by which the aid given could be most effectively used.

The Second International Conference of Broadcasting Organisations on Sound and Television School Broadcasting held in Tokyo in April 1964, provided an excellent opportunity to discuss the proposal with representatives of all countries interested in this field of activity and also to discover if some of them would be

willing to participate in a working group. It was felt that if the group was to be effective, it should be kept as small as possible, providing, of course, that important regions of the world and representatives of the organisations most experienced in educational television were included. A list of the members of the Working Group is given in Appendix A.

The CETO delegation to the Tokyo Conference found a very warm reaction to the proposal from most of the countries concerned, and accordingly it was decided to proceed with the scheme. As a result, a meeting of the Group was called in London in November, 1964. Working papers were circulated well in advance to all those invited to attend the meeting, and this enabled them to discuss the various problems with their own particular organisations or Governments before coming to London. Relevant papers are attached as appendices to this report.

PURPOSE OF THE WORKING GROUP

One of the principal aims of the Working Group was to discover how far the producing countries—either individually or through co-operative effort—could meet the needs of the less developed countries. It was clear, from a preliminary survey which CETO had carried out, that most of the developing countries with television services were well aware of the possibilities of using the medium for education, but their exploitation of television varied considerably. In some cases, services had been set up to cover limited areas, as in the case of New Delhi and Northern Nigeria. In other cases, experiments had been carried out without a regular service being instituted. It was clear that the needs of the various

countries would differ very considerably.

It emerged at the beginning of the Working Group that the matters under review could most conveniently be dismissed under the following four heads:

1. Advice and assistance on the establishment and organisation of an educational television service, whether directed to schools or adults, or both—this assistance to include the effective utilisation of the programmes at the receiving end.
2. The training of personnel, particularly in the production and presentation of educational television programmes and the consideration as to whether training could be more effectively carried out in the territories themselves or in training establishments in the producing countries.
3. The supply of programme material to newly developed education television services and the examination in general of the suitability of material already available.
4. The co-ordination of information regarding:
   (*a*) The capacity of the producing countries to provide the necessary assistance in any of the above-mentioned fields.
   (*b*) An examination of the precise needs of the developing countries.

1. ADVICE AND ASSISTANCE ON THE ESTABLISHMENT AND ORGANISATION OF AN EDUCATIONAL TELEVISION SERVICE, WHETHER DIRECTED TO SCHOOLS OR ADULTS, OR BOTH—THIS ASSISTANCE TO INCLUDE THE EFFECTIVE UTILISATION OF THE PROGRAMMES AT THE RECEIVING END.

The discussions disclosed that many of the developing countries were unaware of the full implications of the organisation necessary to establish an effective service.

In some cases services had been established on a haphazard basis without proper financial provision and without a satisfactory organisation for the effective utilisation of the programmes in the schools or community centres. There are certain technical limitations particularly related to the coverage of television services in developing countries. Limitations on this coverage are dependent not only upon the power of transmitters, but also on the existence of electricity supplies for operating receiving sets. The Working Group in this connection emphasised the necessity for proceeding with research into the development of television receivers which could be operated independently of mains electricity, and noted that some hopeful lines of research were being pursued and that it was quite possible that in the near future there might be a break-through in this direction.

On finance, the Group recommended very strongly that any country proposing to establish educational television should ensure that proper provision was made in the budget for an effective staff capable of producing an adequate number of programmes in conjunction with the local Education Authority, and for an organisation which would be able to cover both the planning of the programmes in conjunction with the schools' curriculum and the satisfactory utilisation of the programmes. To discover the real costs of an educational television service, it is necessary to take into account a number of factors which vary considerably from country to country: in particular, whether the existing television service can be used for educational purposes during appropriate hours of the day and whether it is able to make air time available free of charge to the Education Authority. The costs of a service have to be computed in relation to the amount of money available for education, to the

effectiveness of television as a teaching medium, to any savings that might be effected, and to the number of pupils that a service could reach.

Costing of this kind is being investigated by the International Institute of Educational Planning. One of the problems is that representative figures are available only for industrialised countries where installation costs are likely to be somewhat lower than in developing countries, while production and manning costs, owing to higher salaries, are likely to be rather greater. In general terms it may be said that a small service, using existing installations, is likely to be within the reach of any country, but the finances of a major educational effort have to be evaluated in terms of the number of pupils that can be reached.

Aims of an Educational Television Service

The Group considered that any country proposing to establish educational television should have a clear policy on exactly what the primary targets were in relation to their own needs. In the past this has not always been the case, with the result that requests for assistance have been vague and indefinite, and in such cases the provision of help has not been as effective as it might have been.

The discussions showed that in many developing countries the major bottleneck in the education system occurs at the secondary level. There are not enough teachers trained for this level of teaching, and expansion is impossible if standards are to be maintained. There is in most countries an unsatisfied demand for secondary school leavers, and too few well-qualified men and women return to the education system. In consequence national development is held back. Teacher shortage at the secondary level is general, but is particularly severe

in science and mathematics, subjects both vitally necessary for a country's technical development. This reason, taken together with lack of electricity supplies in primary schools and the comparatively small capital investment involved, has persuaded the education authorities of many countries to carry out their intial experiments in ETV at the secondary level. In some cases, television programmes are planned as a supplement to existing teaching to improve the quality of the lessons; in other cases, the authorities are hoping to follow the example of Italy and use television as the principal teaching force, either throughout the curriculum or in certain subjects.

As well as transmitting programmes for secondary schools, many countries are planning to transmit to training colleges also, with the intention of raising the standard of teaching, especially in primary schools. In other countries the conquest of illiteracy is the present main target of educational television.

Initial Advice

Television is an expensive medium and involves the use of complicated skills. Hence developing countries tend to rely on those with experience in its use. One of the more important aspects of aid is the initial advice which embraces all aspects of the problem which any particular area poses. On the educational side, the advisers need to be well briefed on the educational system and aims of the country and to stay long enough to be able to estimate the probable results of any recommendations they may make. Their report should be made after consultation with the education authorities. It should state with precision the aims of the service and should give an opinion on those points at which television can make the greatest impact on the quantity or quality

of education. These will vary greatly from country to country. In Thailand, for instance, a high proportion of the children attend school, but the quality of the education is poor. In Sierra Leone, on the other hand, the small proportion of children at school is a major concern. El Salvador wishes to increase, as rapidly as possible, the numbers attending secondary schools.

After making general recommendations, the advisers to a developing country on the use of educational television should proceed to detail the type of organisation needed, the technical requirements which would be essential to carry them out, and the number and qualifications of people to be trained, including both production and teaching personnel. Above all, the authorities will want to know the capital and running costs of a service; obviously proposals must be kept within the limits of what can be afforded.

A phased development of educational television will frequently be found to be the most practical approach. First, during the running-in period, a small educational unit can make use of existing commercial or government studios and transmitters. The next stage, to increase output, may be the construction by the appropriate authority of one or more studios with their own recording facilities; this will involve not only an increase in production staff, but also the employment by the education service of its own technical staff. Finally the education authorities may decide to erect their own transmitters, so that educational television programmes can be broadcast at all times. The details of any development of this kind will vary greatly according to the circumstances in each country.

Seen from the point of view of those giving assistance, one of the main problems is to find people with the necessary expertise in education and television to give

2. The training of personnel, particularly in the production and presentation of educational television programmes and the consideration as to whether such training could be more effectively carried out in the territories themselves or in training establishments in the producing countries

Before a country can embark upon a programme of educational television, it is essential that it should have at least a small pool of trained personnel capable of producing and presenting the educational television programmes. Initially, if a television service is already existing in the country, it is probable that that service will be able to provide the necessary engineering staff. If this is not so and the educational television service requires its own studios from the outset, staff can probably be recruited from the local technical schools or the training schools of broadcasting organisations in overseas countries. The manufacturers of the equipment will also in many cases provide training for engineers.

The training of producers is another matter. Most countries prefer to train men and women who are already teachers and who understand the educational needs of their schools or adult viewers, rather than attempt to train broadcasters to produce educational programmes. Their need is for basic training in television techniques. Various solutions to the problem have been found. In some cases individuals have been attached to operating stations, for instance in the U.S.A. The drawback to this method is that the trainees are there as observers and cannot themselves take responsibility for production; moreover by this method they sometimes obtain no systematic instruction.

An alternative method is to send trainees to training schools. There are a few courses of this kind for producers such as the annual course run for producers by NHK, the Thomson Foundation, and OCORA (mainly for the francophone countries of Africa). Courses—at present two a year each of 13 weeks' duration—specifically devoted to educational television are held by CETO; these are heavily over-booked. An interesting arrangement is that made between Ghana and the Canadian Broadcasting Corporation, whereby trainees after receiving basic training in Ghana are accepted for attachment in Canada.

A question much discussed is whether it is better for trainees to be trained at home on the equipment they will be using, or abroad where they can see advanced educational television in action and make contact with people with wide experience. The difficulty of training at home is that adequate studio and other facilities are rarely available, especially if training is carried out in a station which is already operating. On the other hand, training abroad is expensive and, with the present paucity of places, can be extended to only a few. It is hoped that at least those who will head educational teams will be trained abroad where they can learn far more about the ways of employing the medium in which they will be operating. At the same time, it must be remembered that the producing countries themselves have widely differing ideas about how the medium should be used. So it is desirable that a producer trained in one country should be given the opportunity of visiting one or more others on his way home to see how the medium is being used and how it is meeting its special problems. At present CETO trainees frequently move on after their London course for a short attachment to Telescuola in Rome. Similar arrangements might be made in other

cases, so that, for instance, producers trained in Canada or the U.S.A. might visit France or Japan or CETO on their way home.

The Working Group found that for the most part the developing countries thought it was preferable for the training to be conducted in their own territory by an expert sent from one of the more experienced producing organisations, although they realised that in many cases such training courses would be restricted by the inability of the local television service to make available sufficient studio time. Assuming, however, that suitable arrangements can be made in this way, training in the territory has great advantages in being able to utilise material and facilities locally available, and will, of course, enable more producers from the particular country to be trained at the same time. Another great advantage of training in the territories is that experiments could be conducted in effective utilisation of educational television programmes in the schools. The major difficulty is to secure enough competent experts to conduct such local courses.

The Group considered that at this stage there was need for training courses both in the producing countries and in the local territories.

3. The supply of programme material to newly developed educational television services and the examination in general of the suitability of material already available

The combined programme output of the countries with well-developed educational television systems is considerable. A considerable part of it is recorded, yet very little of it finds its way into the systems of the developing countries. The cause is not due to any

unwillingness on the part of the ' producer ' countries to allow their programmes to be used elsewhere—the reverse would be true. It has been found, however, that for the most part educational television material produced for domestic audiences in Europe and the United States is rarely suitable for projection to schools in the developing countries without considerable adaptation. Such adaptation may be beyond the resources of the developing countries concerned and in any case problems of copyright are likely to be involved. This particularly applies to on-syllabus subjects such as science, mathematics, geography and language teaching. It applies less to documentaries and entertainment material.

Programme material suitable for transfer may be of two kinds—complete programmes and film sequences. Video-tape recordings are not at present likely to be widely exchanged, partly because of the high cost of video-tape, partly because many countries are not yet equipped with video-tape recorders, and partly for technical reasons. Complete films made for classroom projection are rarely suitable for TV as they stand, though broken into sequences and used in televised form they may be very valuable; several owners of these films will not however permit this to be done.

Telerecorded Programmes

The main source of complete programmes is therefore telerecordings of educational programmes. These have certain apparent advantages: they are produced for the television medium; they are distributed cheaply, sometimes free; they boost local output with little expense. Unhappily experience shows that problems of language, speed, background and syllabus often at present make these programmes only marginally useful for broadcasting. Their main value would seem to be in establishing

standards and as a source of ideas for local producers. A small supply of telerecordings and films are available from several countries, including France, Italy, U.S.A., Japan and the U.K.

Film Sequences

How far then is it possible to obtain sequences of film made in one of the producing countries for incorporation in the programmes of others? One of the most important elements of a programme is the moving picture which can illustrate an event or process either as it actually takes place or by animation. This material is frequently difficult or expensive to produce, but a vast number of sequences are stacked away in the vaults of the major TV producers. The question is whether it is practicable to make this material available. To do so, it would be necessary for each producing country to build up a catalogue of sequences with a very precise definition of the content of each sequence. A full-time member of staff would be required and considerable storage facilities. There would have to be clear guide lines on what should be kept, and there would be the cost in some cases of transferring these sequences from tape to film. World copyright on all the material in a sequence would have to be cleared. It would be extremely difficult for a producer requiring assistance to define precisely his needs.

There may be ways around some of the difficulties. Eurovision, for instance, circulates information about material available among its members, and it may be possible to operate a similar scheme among developing countries, using *CETO NEWS* as the vehicle for circulating information about the needs of developing countries and about films or film sequences which can be supplied.

Much will depend on how far Governments are prepared to accept financial responsibility for any scheme of this kind as part of their assistance to the under-developed countries. Another solution may lie along the lines of the programme kits produced by CETO.

These package programmes are of considerable use to stations embarking on educational television and additionally they provide an important source of visual material, including captions and film sequences, which can be adapted by television stations to meet their own particular needs.

Liaison between Broadcasting Organisations

The Group emphasised the importance of continuing liaison between broadcasting organisations in the field of information and supply of programme material for developing countries. In a resolution, it proposed that producing organisations should consider appointing a particular officer who would continue to maintain such liaison, and it was hoped that by this means there would be a freer flow of information between the producing organisations, which could then be made available to assist countries in meeting their programme requirements.

4. THE CO-ORDINATION OF INFORMATION REGARDING:
   (a) THE CAPACITY OF THE PRODUCING COUNTRIES TO PROVIDE THE NECESSARY ASSISTANCE IN ANY OF THE ABOVE MENTIONED FIELDS
   (b) AN EXAMINATION OF THE PRECISE NEEDS OF THE DEVELOPING COUNTRIES

Although educational television is deeply rooted in the needs and educational system of its own country, it is very desirable that producers should not feel themselves

isolated, but should be aware of developments in other countries, of new methods and techniques, and of the various forms of help avilable in solving their problems. They should also be able to express any needs they may have for assistance. To some extent this can be achieved through courses and meetings, but more permanent contact can be maintained through the distribution of *CETO NEWS*.

It is also desirable to maintain a centre of information about the educational methods of each country, including copies of syllabuses and textbooks, up-to-date reports and surveys of educational systems, detailed accounts of the uses to which educational television is being put, and of the types of visual material needed. The developing countries must be precise in their requests for information regarding the material required, in particular stating the educational level of the target audience. In this connection it has been found that most of the developing countries place emphasis on the senior primary or junior secondary level.

More factual information on the priority of needs and effective utilisation of television could be derived from the conduct of carefully controlled pilot schemes.

The wide variety of outlooks and resources among the producing countries and of needs among the developing countries make any carefully co-ordinated attempt to develop educational television unlikely, but a high degree of co-operation is possible and desirable. As a start, the producing organisations might appoint someone specially charged with the task of finding out about needs and of fitting his organisation's resources to meet them. The development of personal contacts and mutual confidence among all those engaged in this work is an essential prerequisite of progress.

Appendices

A. List of Members of the Working Group
B. Resolutions of the Working Group
C. Basic Information about Educational Television in Developing Countries
D. Training
E. Programme Needs in Developing Countries
F. The Production of Educational Television
G. Questions for an Educational Survey

APPENDIX A

LIST OF REPRESENTATIVES ATTENDING CETO INTERNATIONAL WORKING GROUP CONFERENCE

NOVEMBER 22ND — NOVEMBER 27TH, 1964

Chairman: Dr. L. Farrer-Brown
Secretary: John H. Alman

Representatives:

1. James W. Armsey	Programme Director, Special Programme in Education, Ford Foundation, U.S.A.
2. Walter Beneke	Member of National Board for Educational Television, El Salvador
3. B. D. Bhatt	Director of Education, New Delhi, India
4. William M. Brish	Superintendent, Board of Education of Washington County, U.S.A.
5. W. F. Conton	Chief Education Officer, Ministry of Education, Sierra Leone
6. James Day	General Manager, KQED, San Francisco, U.S.A.
7. H. Dieuzeide	Head, School Television and Radio, Institut Pedagogique National, Paris.
8. Yoshio Hori	Chief Representative of the London Bureau, Japan Broadcasting Corporation, Japan
9. Kwan Sai Kheong	Acting Permanent Secretary, Ministry of Education, Singapore.
10. Rolf Lundgren	Head of School Broadcasting, Sveriges Radio, Sweden
11. Keith Mackriell	News/Talks Representative, Australian Broadcasting Commission
12. Khunying Ambhorn Meesook	Director, Division of Educational Information, Thailand
13. R. D. Michaud	Supervisor of School Programmes in Montreal for the French networks, Canadian Broadcasting Corporation
14. Guthrie Moir	Representative, Independent Television Authority, U.K.
15. Professor Italo Neri	Director, Centro di Telescuola Radiotelevisione Italiana, Italy
16. Kazuo Ogawa	Chief Representative of the General Bureau for Europe, Japan Broadcasting Corporation, Japan
17. Dr. F. B. Rainsberry	Supervisor, School Broadcasting and Youth Programmes, Canadian Broadcasting Corporation
18. John Scupham	Controller of Educational Broadcasting, BBC, U.K.

Observers:

1. Guy Benveniste	International Institute for Educational Planning
2. Michael Glover	Director of Educational Aids Department, British Council
3. Henrik Hahr	Administrative Director, European Broadcasting Union
4. Geneviève Marais	Ghana Television
5. A. G. Ridley	Ministry of Overseas Development, U.K.
6. Kunn Suchanya	In charge of Schools Broadcasts, Bangkok and Thonburi

Representatives from CETO:

1. Commander J. C. R. Proud	Director
2. L. J. Lawler	Production
3. J. R. C. Morton	Information and Research
4. T. Singleton	Training

APPENDIX B

RESOLUTIONS

The Chairman drew up a summary of resolutions made during the discussion sessions and presented these resolutions to the Working Group under the headings of Training, Production, and Information.

1. RESOLUTIONS ON TRAINING

(a) Producing countries should collaborate so that CETO trained personnel might attend other training courses or TV establishments to broaden their knowledge of ETV, and that personnel trained in ETV techniques outside the U.K. might receive an extension of training at CETO.

(b) Experienced ETV producers should be seconded to CETO for periods of up to twelve months. Such officers would be attached initially to CETO and then proceed to a developing country to assist in the organization and training of personnel for ETV services.

(c) There should be an exchange of information on training courses given by producing countries in developing countries in order to avoid as far as possible a duplication of effort. Also there should be an extension of co-operation in the organization of regional seminars for the purpose of training producers in ETV; these seminars should normally be of two to three months' duration.

(d) CETO should investigate in conjunction with broadcasting organizations (consulting with EBU and ABU) the possibility of extending present schemes to include:

(i) Courses for administrators in TV
(ii) Courses of an advanced nature for skilled TV producers
(iii) Courses for ETV producers who would work together in teams to produce series of programmes using courses of material already available
(iv) Courses specializing in teacher utilization of TV
(v) Specialists' courses in, for instance, graphics and film-making

2. RESOLUTIONS ON PRODUCTION

(a) As some producing countries had not clearly defined their policy towards aid for developing countries, members recommend that they be encouraged so to do. As 1965 was named as International Co-operation Year (ICY), representatives agreed to bring to the attention of their Governments the needs of developing countries in the field of educational television.

(b) Producing countries might well investigate the sources and channels by which materials could be made available to the developing countries.

(c) Producing countries should be encouraged to catalogue this material and indicate if their material could be edited by receiving countries.

(d) All members agreed to use CETO as a clearing house for information received in (c).

(e) Representatives of producing countries recognized that wherever possible they should clear rights on complete programmes and programme material so that developing countries might use them.

(f) Representatives accepted the offer of CETO to engage an officer and secretarial aid who would investigate material available for developing countries. *CETO NEWS* was accepted as the most suitable means of providing information about this material and of circulating the needs of developing countries.

(*g*) Representatives agreed to co-operate in exchanging information, including information about projected services.

3. RESOLUTIONS ON INFORMATION

(*a*) CETO should collect, analyse and distribute educational information to both producing and developing countries.

(*b*) Textbooks and current schools' syllabuses should be supplied to CETO by developing countries.

(*c*) Information about educational TV programmes and services should be gathered by CETO with the help from both producing countries and developing countries.

(*d*) *CETO NEWS* should extend its services as outlined in Training Resolution (*c*) and Production Resolution (*g*) above.

Arising from the resolutions on Information, the Chairman emphasised the unanimous opinion of all members that in the collation of information there must be an attempt to obtain greater precision about the requirements of each country.

PILOT PROJECTS

There was a general agreement that an important way of obtaining information and conducting research into educational television is through the pilot project in the field. The suggestion had been made at the Commonwealth Education Conference in Ottawa that a developing country might be asked to take part in a pilot project. Funds had been set aside by the United Kingdom for the period 1965-1966, but the project was limited to Commonwealth countries.

The Working Group recorded that pilot demonstrations were likely to be of value in the establishing of ETV programmes in developing countries. CETO should take part in the conduct of pilot schemes, if possible.

HUMAN LINKS

Representatives of the producing countries resolved to raise with their organizations the question of appointing a liaison officer charged with maintaining contact with others interested in the provision of ETV aid to developing countries. It was agreed that such an officer, if appointed, would act as a correspondent with CETO and so facilitate an exchange of information.

All members agreed that one of the best means to achieve the aims of the meeting was through the extension of personal contacts among all those involved in this work. The mutual confidence developed among members of this working group and the friendships developed showed the way in which the kind of co-operation envisaged could be brought into being.

APPENDIX C

BASIC INFORMATION ABOUT EDUCATION AND TELEVISION IN DEVELOPING COUNTRIES, AND FILM MATERIAL AVAILABLE TO THEM

I. EDUCATIONAL INFORMATION

The aim of this Working Group is to consider the means by which those countries with the necessary experience and resources can turn into practical form their desire to assist other countries, especially the developing countries, in their endeavour to use television for educational purposes. The task is so vast that no one organization or country can hope to provide effective help on its own. In view of the diversity of organization and methods among the 'producing' countries and the great number of countries looking for help, a single body is likely to be unwieldy. Each country or area must find the way in which it can best give help. But there is a danger of overlap and unnecessary labour if there is no co-ordination of their efforts; this is especially true in the field of information.

Organizations which are concerned with the production or distribution of programme material for other countries must have full information about their requirements. With this in mind, CETO has been collecting information which would be useful for this purpose. Attached to this paper are the following documents:

1. A list of questions, the answers to which should provide the necessary background knowledge; it is essential that this background knowledge be supplemented by a study of the current schools' syllabuses and school textbooks in use.
2. A paper indicating in general terms the needs of developing countries, so far as it has been possible to discover them up to the present time.

To collect such information is not an easy task, as it largely depends on personal contacts in the developing countries. It has, however, been found that bodies such as university institutes of education with overseas training departments and the British Council hold some of the information required. No doubt other countries would find similar sources. The members of the Working Group may like to consider these papers, and perhaps recommend further details of information which may be needed. They may also wish to suggest the best methods of contacting developing countries, with a view to passing on to a centre the information required.

It is possible that CETO would be able to act as such a centre. CETO would collect, analyse, and distribute this information to producing countries concerned with supplying the needs of the developing countries. This would be available, not only to those countries producing material specifically for educational television systems abroad, but also to countries with a highly developed educational system. In the latter case they could decide, with the information in mind, which of their existing programmes might be suitable for specific overseas countries. If it is felt that one centre could not usefully do this work, CETO would be prepared to distribute the information in its possession to any producing organization which wished to develop a similar system of its own.

2. INFORMATION ABOUT ETV PROGRAMMES AND SERVICES IN DEVELOPING COUNTRIES

The information needed under this heading would consist of details about educational television in those countries developing, or proposing to develop, an effective service—either for schools or adult viewing. It would include the scope of such services, the organisation in the schools, the existing or potential number of viewers, and the type of programmes most urgently required.

3. OVERSEAS DISTRIBUTION

One of the problems facing countries developing educational television in the adult or schools fields, is lack of information on existing film material which would be suitable for their purposes. CETO has tried to assist in this by viewing material and listing in its publication, *CETO NEWS*, films which might be suitable, with little or no modification, for showing in developing countries. The resources of the organisation, however, are limited and it has not been able to do as much viewing as is desirable. For the most part CETO has been limited in the selection of material to those films available in the U.K., and therefore mostly coming from U.K. sources.

It is impossible for one organisation to act as a complete international clearing house for this purpose, and in fact at the Tokyo Conference it was generally accepted that such a clearing house would be unwieldy. If, however, producing organisations were aware of the information which could be made available through the means suggested in Section 1 above, they might themselves be willing to assess the suitability of their existing material for overseas use, and to arrange for such assessments to be passed to the user countries. In addition, if any of the producing organisations would like material to be further assessed by CETO, it would be possible to make such an arrangement, providing that the demands on viewing facilities were not too great. CETO would be prepared to make available space in *CETO NEWS*, which has a wide distribution in the developing countries, to assist in bringing such material to the attention of the ETV authorities.

Problems of language might arise in some instances, and the Working Group might consider which languages would be most generally useful. It would be helpful if permission could be given for films to be dubbed or shown with a commentary translated locally. In these cases it will be necessary to provide a full script of the commentary with the film.

One of the greatest difficulties facing most countries starting educational television will be the lack of visual material of all kinds. An important aid which the producing organisations could give would be the supply of sequences and stills on request. It is recognised that it is very difficult to catalogue or to find particular items required, and any organisation which was willing to do this on a considerable scale would need staff appointed for the purpose. It may be worth discussing the practicability of a service of this kind.

If other organisations are considering the production of a publication similar to *CETO NEWS*, CETO would be happy to co-operate with them and to provide information on its own productions for publication.

4. SUGGESTED TOPICS FOR CONSIDERATION

To sum up, it is suggested that the Working Group should consider:

(1) The design of a suitable questionnaire for dispatch to overseas countries on their educational systems.

(2) Methods by which the suitability of existing educational material can be assessed, and the information about them pooled and made available.

(3) The possibility of making film sequences and other visual material available to developing countries.

(4) The use of *CETO NEWS*, or other publications, for passing this information to the user countries.

(5) Collection and pooling of information regarding the scope of educational television services in developing countries.

APPENDIX D

TRAINING

1. THE PROBLEM

As has been outlined in the paper dealing with information, educational television is developing extremely quickly in the emerging countries, but the techniques for its application have in most cases been only superficially explored. At the present time television systems in the countries under consideration are for the most part broadcasting stations, either controlled by the government or working through a corporation or commercial authority. In most cases, commercial advertising is included in the programmes as a necessary means of supplementing the revenue.

This means that the operators of the stations are for the most part interested in the entertainment field. In a number of cases, while they are prepared to make air time available for educational use during the day for schools or early evening for adults, they are not equipped nor have they the resources to produce educational programmes suited for the audience.

Under these circumstances it usually falls upon a department of education or another government department to provide educational material to the broadcasting service, making use of their technical facilities while being responsible themselves for the programme content and production. In a very few cases has an organisation been set up which is capable of handling this, and the countries look to us (i.e. those organisations which have had considerable experience in educational television) to provide the necessary advice and training so that they can equip themselves to meet this need.

There is of course a necessity to provide training facilities in general production techniques and engineering for countries establishing a television service, but this is not considered within the terms of reference of this group, and is in many cases being provided by national organisations. Here we are only concerned with the provision of training for those people who will be involved in the use of television for educational purposes.

Those representatives who attended the Tokyo Conference will recall that a very considerable emphasis was placed by delegates from some of the developing countries on the need for training in the countries themselves, so that they could be trained with the existing facilities and the training could be closely associated with the local requirements. An additional advantage of this method of training is that large numbers of students in any one country could be trained in a crash programme during a period of a few months.

There is, however, in addition to this an urgent need for the training of personnel in the producing countries where they will be brought in touch with modern developments and techniques, will broaden their knowledge of the world—both by their contact with the people of the country and the other members of the courses—and will have facilities available which would not be present in their own countries. It would therefore seem that the two systems of training should be correlated in any planning.

From the research that we have made, it would seem that the priorities for training should be:

(1) Advice on the organisation of educational television under perhaps the appropriate government department or departments, and including not only programme production but the briefing of teachers, the effective

maintenance of sets, and the preparation of ancillary material such as teachers' notes.

(2) The training of teachers and other officers in the use of television for educational purposes, either as producers or as presenters of educational programmes.

(3) Supplementary training for television producers who have had general production experience, but no experience in the specialised techniques needed for the production of educational material.

Papers will be circulated at the conference giving an approximate assessment of what the demand will be in this field in the various countries of the world, but from our experience it would seem that within the next two years this demand will be universal and is certainly steadily increasing in such widely different areas as Africa, South East Asia, the Middle East, and Latin America.

The following notes will give an indication of how CETO has been endeavouring to approach this problem and emphasise that our contribution can only be a small one with our existing resources. We feel that the need is so great that, if it is to be satisfactorily met, it will need a pooling of international resources.

2. DEFINITIONS

(1) Training in the context of CETO means:

(*a*) subjecting suitably qualified educators to an intensive and practical course in the use of television for educational purposes and

(*b*) subjecting suitably qualified and motivated television producers to a similar and concurrent course emphasising how their skills can be exploited by educators.

(2) By Educational Television, we mean broadly:

(*a*) a free broadcast system that can be closely integrated with a schools system and aimed at students undergoing a recognised syllabus of study

(*b*) an extensive closed circuit system where television is used for direct teaching methods

(*c*) a free broadcast system supply 'enrichment' or supplementary programming

(*d*) any system supplying adult educational material outside the normally accepted working hours.

3. GENERAL SITUATION

The training undertaken by CETO falls into two parts:

First, the regular formal training given during the periods April/May/June, and October/November/December of each year at the London closed circuit studio at the Centre.

Second, the training that is given in the overseas situation by the Head of Training during tours of duty between the London based courses. The latter system is only satisfactory when there is a guarantee that facilities and suitably qualified personnel can be made available, but such visits are necessarily of short duration.

No training of a formal nature is given in engineering techniques, although advice in a general way concerning installation and equipment is frequently sought by, and given to, visitors to the Centre, showing a need for an exchange of information on new equipment and development of studio techniques. This might be done through the publication of a journal or inclusion in the already existing *CETO NEWS.*

4. SOME PROPOSALS

For overseas training to be carried out effectively, it is obviously desirable that officers should be seconded to Governments or organisations for a considerably longer period than CETO is at the moment able to do, owing to its limited staff resources. There is a great paucity of experienced educational television producers who would be available to go overseas for protracted periods. To try and overcome this, CETO is creating a small " fire brigade " force of such producers, who would be attached to CETO and trained in CETO methods of presentation, and who would then proceed to developing countries for periods of up to twelve months. The demand for people of this kind is likely to increase very considerably in 1965, 1966, and 1967, when a number of Governments is establishing television services and is proposing to use these more extensively for educational purposes.

The " fire brigade " force within the existing resources of CETO must necessarily be very small, and it is highly improbable that the resources of this organisation within the next two years would be capable of meeting what is expected to be a very heavy demand. There is another problem, and that is that it would not be attractive for producers to be recruited for such a force if they would have to resign from their present posts and merely go abroad for a year without a definite prospect of employment when their mission is completed. For this reason the Working Group is asked to consider whether producing organisations might be able to make available one or more of their production staff with experience in educational television; after a short attachment to CETO they would proceed to an overseas country on secondment. On completion of the mission they would then return to the parent organisation, and it is hoped that the experience they gained in the field would be of value to that organisation and also would have broadened their own experience to such an extent that they would be capable of taking more responsible posts on their return. It is realised that there are difficulties in matters of this kind, particularly because of the resettlement problem when officers return. It is, however, hoped that if the period of secondment were not longer than a year the resettlement problem would be considerably reduced. CETO would consider financing such attachments under a Ford Foundation-CETO Fellowship scheme.

If producing organisations have individual requests from overseas countries to send officers abroad, and are able to meet these requests, CETO would be very happy to place its resources at the disposal of such officers, who could come here for a short attachment—particularly during CETO training courses—and familiarise themselves with the area to which they are going and have some experience in the training of overseas students before proceeding on their mission.

CETO would also be happy to accept attachments from producing organisations of members of their staff who are proposing to specialise in the production of material for overseas markets. Such attachments could be of any required duration, and the officers could actively work on CETO productions and assist training courses in London. CETO would be prepared to bear the cost of such attachments.

5. OTHER TRAINING

It is not only in producer/scriptwriting fields that training is required. Few television stations are able to exploit to the full the advantages of the medium—usually because the Design and Graphic Arts section is inexperienced, overworked, or non-existent, and the educator is required to produce a whole complex of captions, animations and artwork himself. There is an urgent need for a specialist course on design and graphics.

Basic training, as given by CETO, achieves a breakthrough but it is becoming

obvious that advanced and refresher courses in the U.K. will be in great demand concurrently with the normal demands of basic training. Teachers working in the TV field should be given an opportunity to experiment with new ideas away from the frenetic, urgent world of day-to-day programming, given an opportunity to assess their work and new ideas in an atmosphere that is essentially professional and sympathetic.

APPENDIX E

PROGRAMME NEEDS IN DEVELOPING COUNTRIES

INTRODUCTION

In most developing countries the range of television, existing or planned, is centred round one or more centres of population and there is a general expectation that it will spread to rural areas later. In India, for instance, television at present centres solely on Delhi, but there is concurrently an experiment in the development of village teleclubs; there are plans to develop television in other big towns. Uganda has started off with fairly extensive coverage, and hopes to achieve national coverage fairly rapidly; again the authorities wish to establish community viewing centres.

The use of television is at present limited not only by the range of the transmitter, but by the existence of electricity supplies. Considerable research is being conducted into the production of receiving sets which are of suitable size and reasonable cost and which are not dependent on local power supplies. A satisfactory solution is likely to be found before long.

1. CHILDREN'S OUT OF SCHOOL VIEWING

All countries need programmes of a generally educational nature for children and adolescents. Since the number of programmes directed to schools is usually small, few age-groups have the opportunity of seeing them and of reaping benefit from the TV service. It is therefore necessary to have in mind the profound educational effect which television can have, and to remember the needs of children of all ages in drawing up schedules for general viewing. The fact that programmes of this kind come from another country is not of overwhelming importance, and may be an advantage.

The programme subjects likely to be needed from abroad are, for example:

A. Simple stories for young children, especially cartoons, which can readily be dubbed.

B. General films on modern scientific developments or techniques which require no specialist knowledge.

C. Films about other countries and the ways people live.

D. Films demonstrating the pursuits and interests of adolescents and young adults.

2. PROGRAMMES FOR SCHOOL VIEWING

In tropical regions it is usual to find secondary schools supplied with electrical current, either from the mains or from its own generator, but few primary schools are so equipped. The result is that whether they wish it or not, the authorities in many countries are at present compelled to transmit to secondary schools which are better staffed and equipped than primary schools.

It is almost universally true that the educational system in developing countries is centralised, with the result that the main demand on the ETV service is for on-syllabus programmes, closely linked to the weekly teaching scheme and text-book. The actual programme content will vary between two extremes: on the one hand the programme may be needed to provide the main teaching content;

on the other it may be required to provide depth and interest to class-room teaching; in either case unless it can captivate and stimulate the children's interest, it will fail in its purpose. Since programmes should be allied to syllabus needs, whole recorded programmes imported from another country will rarely hit the mark, valuable though they may be in the early stages as a time-saver. But though the programmes may not be required, the visuals which support them are in many subjects likely to be of almost universal relevance and in most developing countries difficult to make and too costly to obtain. Thus the main demand from producers is likely to be for film sequences, stills, diagrams and animations of all kinds, whether on film or for ' live ' use in front of the camera.

There would seem to be the following means of making material available to other countries:

(1) *Through the Programme Kits*
The scripts and other written material are likely to be useful in the early stages of a station's life. Thereafter the visual material may be of more value. It would be possible for CETO to list the material available in each series.

(2) *Through complete films*
In some subjects, especially geography, whole films of telerecordings from other countries may be acceptable. In other cases stations would need permission to extract such sequences as they need. It might be possible to develop some means whereby *CETO NEWS* could publish lists of telerecordings (cinescope) available in other countries, with some details of the content. To carry this into the realm of educational film would seem impossible, both because of the number of films and because of the method of cataloguing.

(3) *Through film sequences and animations*
To go over the backlog would be difficult, but if producing stations appointed someone for the purpose it would be possible to list newly made useful sequences and publish them periodically—either in a special catalogue distributed throughout the world, or in *CETO NEWS*.

The normal school subjects in which an exchange of material would be likely to prove of greatest value are the following:

(*a*) *Scientific Subjects*
Physics is likely to prove one of the most important fields for exchange throughout the entire subject range. Chemistry is likely to offer opportunities for visual presentation. Television is a particularly good medium for teaching biology, but syllabuses are somewhat regionalised; nevertheless for those countries still tied to British or French educational background and examinations a considerable amount of suitable material must be available.

(*b*) *Health Science*
While the principles are universal, their application will vary from region to region. Programmes are needed in physical education, sports and games.

(*c*) *Domestic Science*
Programmes are needed in all aspects of women's education.

(*d*) *Mathematics*
One of the subjects most in demand, but most difficult to supply because of the changing nature of its content and method of teaching. It appears that syllabuses of most developing countries adhere to the traditional approach for which it is difficult to supply visual material outside the context of the national background.

(e) *Geography*
Early stages of Geography are likely to be local in content. There must however be a great deal of exchange material available at all levels in human geography and natural products, and also in subjects such as latitude and longitude, day and night, different regions of the world.

(f) *Living Language—e.g. English or French*
There is a great demand for assistance in teaching living languages, if only because the teachers themselves require quite as much practice in the oral-aural side as the pupils. Teaching material in these subjects has to be specially made to suit local needs, but where countries have direct-method courses they might be useful elsewhere. The main difficulty is aligning the course of one country to the syllabus and text-books of another.

(g) *History*
In the case of early civilisation and ancient history it might well be possible to translate whole programmes from one country to another with a simple change of commentary; certainly there would be long sequences which would be translatable. Programmes dealing with more recent history are not likely to be so easily translatable since each syllabus will lay emphasis on different aspects of historical events and an "objective" interpretation of historical events is extremely difficult. Nevertheless photographs and models and, in case of very recent history, films used in one country may be invaluable in another.

(h) *Teacher Training*
Problems of background are of little consequence, and whole films illustrating teaching methods could be exchanged.

(i) *Fine Arts and Humanities*
Many programmes dealing with cultural subjects will have to be based on locally produced material, but some subjects are of international significance. Such subjects may be more suitable for out of school viewing.

(j) *Vocational Opportunities and Guidance*
It may be possible to exchange films describing the kinds of work involved in different occupations.

5. PROGRAMMES FOR ADULTS

At the elementary intentional stage of programmes for illiterate or semi-literate adults, the approach has to tie in tightly to cultural patterns and there would seem to be little profit in exchange of material. What is needed at present is an exchange of information about methods used and their success; the report of failure may be just as important as the reporting of success.

So far as exchange of material is concerned, adults are likely to get considerable profit from the kind of programme listed under 1.—*Children's Out of School Viewing*

APPENDIX I

THE PRODUCTION OF EDUCATIONAL TELEVISION

The television equipment found in nations all over the world is basically the same and there is a similarity in the production techniques. There seems to be little evidence that there is any profound difference in the audience reaction found in the many countries with television stations. Even in small nations where local production is limited, highly sophisticated productions are shown with great success, through the use of canned material. This implies that, with certain proviso, the exchange of television productions between countries is acceptable and that those tenets of production applied in one country also apply elsewhere.

The similarity of reaction the world over is found to apply both to adults and children, and it does not matter whether the material is for entertainment, information or education so long as it is interpreted for a local audience effectively. There are, however, differences of programme balance and emphasis which must be taken into account, particularly when considering educational needs. In many countries there are large gaps in the educational coverage. Universal education may be so recently developed that a large proportion of the adult population has had little or no schooling. This means that there will be wide illiteracy, a lack of training in modern technical methods, a widespread resistance to change and an unfortunate dichotomy between the young and their elders. Television provides a heaven-sent opportunity to tackle these problems because it is ideally suited for mass communication to uneducated adults. Wide dissemination of knowledge through communal viewing of television offers an extremely economic and effective method of making up for the deficiencies of the past, and of defeating the problem of providing an adequate supply of teachers by traditional methods of training during a period of population explosion.

Similarly, an evolving educational system usually has a great shortage of school premises, equipment, and trained school teachers. By television, large classes taught by inexperienced teachers can obtain expert tuition and experience of specialised equipment extremely economically.

Yet in many countries the potentialities of television are not fully realised. This is partly due to lack of knowledge by the authorities, but it is also due to a realisation that the availability of good television equipment is not enough to ensure the establishment of an effective educational television service.

The men required to put educational television on the air consist of three main participants: the television technician who can ensure the reliability of the electronic equipment, the experienced educationalist who can define the aims of the programmes, and the educational producer who can interpret the educational content in television terms. It is the experienced producer who is usually missing. Until his existence is available in sufficient numbers, large scale and effective educational television cannot begin.

The professional educational producer has to have a teacher's instinct and be a craftsman at his job. The craft of the television producer is complex and requires a long apprenticeship. It is up to the developed nations to see that trained personnel are available in sufficient numbers to carry out the initial development of ETV systems and to train future producers. These experts will require a great deal of help in the early stages and will have to use recorded material from those countries who have established ETV.

The following notes suggest some of the problems of production that might profitably be surveyed by the International Working Group.

1. TO EXPLORE THE POSSIBILITY OF THE PRODUCING COUNTRIES TAKING INTO ACCOUNT THE NEEDS OF THE DEVELOPING COUNTRIES IN PLANNING FUTURE PRODUCTION

A. When considering the needs of developing countries during the production of a home-based series by a nation with an established television system, it is necessary that its producer has a clear briefing of what is required. There is an urgent need for an international centre to provide producers with precise and up-to-date knowledge of the requirements of overseas territories which might subsequently make use of the producer's programmes.

B. Apart from the technical aspects of 16 mm. blow-ups which will arise if a home-produced programme is being made available for showing in developing countries, the producer will need to take a number of points into account during recording. These include the subsequent transfer of recorded material from videotape to 16 mm. kinescope, the type of sound track and the possibility of overseas dubbing, the necessity for editing a shorter version of the programme for dubbing into a foreign language, and the avoidance of gimmickery. It may be found useful to discuss the producer's problems in detail.

C. Since it is obvious that a producer involved in the production of a dual-purpose programme will be required to increase his responsibilities, it is vital, if the home produced programme is not to suffer, that the additional work should be cut to the minimum. It may, therefore, be advisable for a producing country to concentrate on making its material available to only one region overseas, the needs of which can be well known to the producer, rather than have him take into account world wide distribution. If such a restriction of overseas distribution is made the producer could cater more accurately for the specific requirements of timing, dubbing and captioning.

D. There is need for a generally acceptable classification of educational programmes which would fit both the home audience and the needs of overseas countries. An attached classification surveys this field. It is important that the distinction between so-called enrichment and direct teaching programmes should be avoided. In countries with established television, most programmes will be of the enrichment type and they therefore might not be acceptable in those areas where, because of low budgets, this type of [illegible] is not [illegible]. All educational television programmes are enrichment in that they create a new dimension of teaching and take the children out of the confines of their classroom. There may be many off-syllabus programmes from producing countries which would be of great use in developing countries if they were incorporated in series which were basically of the so-called direct type. It is suggested that "on-syllabus" and "off-syllabus" might be used as substitutes for "direct" and "enrichment".

2. FOR THE PRODUCING COUNTRIES TO AGREE ON ARRANGEMENTS BY WHICH THEIR PROGRAMME MATERIAL, OR PORTIONS OF THIS MATERIAL, COULD BE MADE AVAILABLE TO CETO FOR USE IN PACKAGE PROGRAMMES

CETO programme kits contain sufficient 16 mm. stock to fill up to half the programme time of approximately twenty minutes. This stock material is

compiled from film sequences specially shot 16 mm. film, including film animation; specially made kinescope 16 mm. sequences; and library material. It is the last category for which CETO would require programme material from producing countries. The idea is that a programme kit consists of six or seven short sequences each of which is an illustration of a single educational point. Since most of the CETO programmes are designed for fairly universal showing, the illustrative material required must be carefully selected. If it is to illustrate conditions existing in a particular country, as most usually occurs in geography programmes, then there is a great need for library shots which are usually available in producing countries. In all other cases, the illustrative material is designed to avoid emphasising the geographical location. The material most useful for CETO kits is that which contains little or no human participation but which concentrates on appropriate technical processes, for example, industry and building, scientific experiments, and in particular animations—either filmed or stereoscopic. It would be particularly useful if producing countries catalogued the educational material they have on film or stereoscopic, in sequence as well as in whole programmes. This may be too difficult a task for film libraries, and it may therefore be necessary to rely on direct contact with the appropriate producer in a producing country in order to ascertain whether a particular illustration is available.

CETO's requirements are in fact paralleled by a general need in developing countries for a library of sequences each illustrating particular educational points. It is anticipated that countries using CETO kits will ultimately build up their own libraries of film sequences, and therefore whatever is decided on aid for CETO at the moment will be equally applicable as the needs of developing countries increase. There are many educational subjects, especially those which aim at stimulating the imagination and participation of the audience, which cannot be covered by CETO because they will be based on too narrow a social need. It may be useful to discuss the possibility of developing countries obtaining a wide selection of short sequences of home produced film material over a very wide range of subjects which could then be used within the educational television unit to produce the requisite type of programme.

This has already been attempted in territories such as Northern Nigeria, where, by using items from newsreels showing visitor specs, launching of ships, opening of new motor ways, public ceremonies and so on, programmes have been devised which can be used to stimulate children's work in art, composition of poetry. These [illegible] which might appear to the producing nation as being of no more interest [illegible] educational programmes in areas where this is not done apply. From a production point of view there need be no extra work for the producer during the actual making of programmes, but when the producer or other officer is ultimately edited to dispose of his recording, say six months or a year after they have been shown, to might save the negatives of sequences of general interest to children to distribution to any area which has been "adopted" by the producing country. Because education is usually one of the most expensive forms of filming, there is a particular need to get the material to as wide a use as possible. In cases where negatives film has been made to illustrate, for example, a mathematical or scientific topic, it is usually found that the kit has a very wide application.

If the Working Group considers that it is feasible to supply overseas territories with sequences, either of film or kinescope, for use in developing countries, it is possible that CETO might become a clearing house for them. In this case, CETO would undertake to produce [illegible] of such sequences and hold a duplicate negative for reproduction and distribution. Ultimately, with consistently expanded

facilities, it is hoped CETO might be able to build up an exchange system by which this sort of sequential material could be distributed for no payment but on an exchange basis between television organizations.

CONCLUSION

Perhaps the most important task at present is to ensure that educational authorities in developing countries realize the potential aid that television can give to their problems of staffing and raising standards of teaching. The second step is to ensure that fully qualified educational producers are available overseas to guide the initial development of ETV systems and to provide the schools and community centres with effective television. This will require the extensive use of programme material originally produced by countries with established services. Later the demand will be for more specific material to meet the local needs. The most efficient method by which co-ordination and economy can be achieved is through international centres specialising in this field.

APPENDIX G

QUESTIONS FOR AN EDUCATIONAL SURVEY

PRIMARY SCHOOLS

1. Assumed age of entry and leaving, or length of Primary Course.
2. If there is a break between Junior and Senior Primary, at what age does it occur? What proportion of children complete the full primary course?
3. Where the language of secondary education is not the vernacular, at what stage is it introduced into the primary curriculum, and what language is it?

SECONDARY SCHOOLS

1. Assumed age of entry.
2. How are pupils selected for secondary education?
3. Is there a distinction between Junior Secondary and Senior Secondary?
4. What is the length of the full secondary course?
5. What are the subjects of secondary education?
6. (*a*) For what examinations are secondary pupils prepared?
   (*b*) Are the examinations set and marked within the country or externally?

TECHNICAL AND VOCATIONAL EDUCATION

Outline of principal courses offered, including methods of entry, length and standards aimed at.

UNIVERSITIES

Names and faculties of universities.

TEACHER TRAINING

Outline of system for training teachers and of qualifications granted.

SYLLABUSES

As detailed as possible.

TEXTBOOKS

List of recommended or obligatory text books in schools.

STATISTICS

1. Number of students educated, and this number expressed as a percentage of total population (except in Teacher Training):
   (*a*) Primary
   (*b*) Secondary
   (*c*) University
   (*d*) Teacher Training
   (*e*) Technical
2. Number of schools or other institutions under the headings above.